

## **Methodology for Preparing July 1, 2013 Municipality Population Updates**

### **1. Prepare Census Data**

Using the Census 2010 as the Base, determine the April 1, 2010 household population, group quarter population, total housing units, occupied housing units, occupancy rates and population per occupied unit for total units for each jurisdiction. Adjust the original census counts to reflect results of the Census Count Question Resolution (CQR) Program.

### **2. Collect New Data**

Obtain the residential housing unit completions and demolitions for the time period from July 1, 2012 through June 30, 2013 from the MAG member agencies.

Obtain annexed and de-annexed housing unit data from member agencies. Determine population change from annexations/de-annexations using persons per household and occupancy rates from the Census 2010 blocks intersecting each annexed/de-annexed area.

Obtain July 1, 2013 group quarters population from survey of MAG member agencies. Subtract the July 1, 2010 group quarter count from the July 1, 2013 to obtain the change in group quarter population.

### **3. Calculate July 1, 2013 Housing Units**

Calculate the July 1, 2013 total housing stock by municipality by adding the net housing units (completions minus demolitions) and the net housing units annexed from step 2 above to the Census base.

### **4. Calculate July 1, Resident Population**

Calculate change in the household population using the Housing Unit Method (HUM) by multiplying the annual change in the housing stock of non-annexed units by the respective occupancy rates and persons per occupied unit by municipality and adding this to the annexed population for each municipality. The occupancy rate and persons per occupied unit by municipality were taken from Census 2010 to calculate the new household population.

Calculate the total household population by adding the change in household population to the estimated household population for the previous year.

Bench the residential population in households to the county control total for population in households from Arizona State Demographer's Office (SDO) to obtain July 1, 2013 population in households. Benching is necessary when the MAG derived total population does not match the control total obtained from SDO. The household population difference is distributed proportional to the pre-beneched household population results for July 1, 2013.

Calculate the total resident population for July 1, 2013 by adding the July 1, 2013 group quarter population from step 2 to the July 1, 2013 household population.